Author: Chupakhin, V., Captain 1st Rank,

correspondent

Title: SHAPOSHNIKOV URGES GRADUALISM IN STRUCTURING COMMONWEALTH'S ARMED FORCES
Primary Source: Krasnaya zvezda, January
7, 1992, No. 5 (20692), p. 1, cols. 1-3; p. 3, cols. 1-3

Extract: Following the Minsk meeting of heads of sovereign states,\* many questions connected with the fate of the armed forces remain open. What position the heads of the Armed Forces of the Commonwealth of Independent States are taking in these circumstances and how they appraise the situation that is developing around the army and inside it were topics of conversation at a meeting which took place recently between journalists and Marshal of Aviation Ye. Shaposhnikov, commander-in-chief of the commonwealth armed forces.

The commander-in-chief said that haste and a lack of mutual understanding in resolving highly important and complex questions have been noticed on the part of the heads of a number of states, particularly Ukraine.

At the present time, the Ukrainian leadership understands the term "strategic forces" to mean only strategic nuclear forces, not taking into account that strategic forces must include everything which ensures the strategic stability of both strategic forces and the armed forces as a whole, noted Marshal Shaposhnikov. The commander-in-chief thought that the position of Ukraine was not entirely in keeping with the Minsk accords in this regard.

[Sovereign states] have the right to create armies of their own. But at the same time, one sometimes gets the impression that not all of their leaders have a complete idea of the problems which they will encounter in this connection, the marshal noted.

He cited the following example as an

illustration. Ukraine has expressed claims to air forces on its own territory. But at the same time, it does not have a single airplane building plant for military equipment. In three months, or half a year at the most, airplanes simply will not be able to fly: there will be no engines, spare parts, components, units or even wheels. Whether Russia will supply them and in what order has not been decided, and a suitable mechanism has not been perfected. The marshal asked whether it wouldn't be better to take precisely these problems as a starting point and not immediately demolish what we now have.

For a whole set of questions connected with reorganization of the armed forces to be solved in logical order during the period of transition, a period of two to three years is necessary, in the opinion of the commander-in-chief. He thought that it would be quite possible, during this transitional period, for the armed forces to be structured so that both national armed forces and general-purpose armed forces under a united command could be on the territory of a single state such as Ukraine, Kazakhstan, Uzbekistan, Moldova or Azerbaydzhan. A precedent for such organization exists in NATO.

Financing of the armed forces is still another sore and complex question. The commander-in-chief said that several versions have now been proposed for taking account of the share of each participating country of the commonwealth in the expenses of these armed forces. He thought that a certain consensus on this question had been achieved at the latest meeting of heads of "We now insist that governments in Moscow. these questions be resolved for the first quarter of the year during the first ten days of January," stated the commander-in-"An agreed-upon quota will be set chief. for each state."

But how will the administrative struc-

council of presidents, which would jointly make all fundamental decisions in regard to the armed forces. (SNAP 920203)

Author: Ivanyuk, I., Major, correspondent Title: EX-SERVICEMEN DEVELOP SPECIAL CONSTRUCTION MATERIALS AND TECHNOLOGY Primary Source: Krasnaya zvezda, January 11, 1992, No. 8-9 (20695-20696), p. 3, cols. 1-8

Abstract: The article reports on activities of the Construction Research and Design Association (Proyektstroynauka), which is utilizing experience with construction of military and space installations. "Proyektstroynauka" is characterized as a high-potential organization which is launching production on the basis of its own scientific developments. This association, which has an annual turnover of millions of rubles, takes in several joint-stock compa-

nies and small enterprises.

A conversation is recorded with Colonel of the Reserves Dmitriy Arkadyevich Frumin, a former military construction specialist and now head of the "Proyektstroynauka" association. Frumin and colonels of the reserves V. Kostin, A. Sytnik and N. Marichev are among a number of engineers who acquired unique experience in construction of fortifications, missile silos and structures of space-launch complexes while serving in the armed forces, the author relates. For example, concrete capable of withstanding a direct hit by a missile with a nuclear warhead was developed, using high-quality cement and scarce superplasticizers. Frumin recalled that while carrying out a contract assignment at Kapustin Yar in 1962, he and his associates achieved waterproofness of concrete which was two to three times as high as usual. Experience of former military specialists reportedly has been utilized in building underground structures for civil defense and watertight structures for underground services, in particular. A new process which makes sealing of joints unnecessary, permanent forms which function simultaneously as facing and wet sealing, concrete ten times as waterproof as conventional concrete, and

other materials with special properties have been developed in this connection.

Frumin showed the author of the article slabs of siligran, a concrete which is not only comparatively inexpensive but said to be capable of withstanding stresses as great as those for which missile silos are designed. Siligran is considered a possible safe substitute for asbestos cement whose use is forbidden in many countries. Other potentially profitable developments of "Proyektstroynauka" include unique processes for producing building materials, and equipment for these processes. The association reportedly has concluded 20 agreements for creation of joint enterprises and facilities, including a Soviet-Bulgarian enterprise, for production of finished products. (SNAP 920203)

Author: Tsarev, I.
Title: REPORTS OF BIOELECTRONIC-WEAPONS
TESTING IN 1970s AND 1980s
Primary Source: Trud, December 27, 1991,
No. 298 (21522), p. 4, cols. 1-2

Extract: Long ago, Gennadiy Petrovich Shchelkunov, a specialist in the field of radioelectronics and an employee of the scientific production association "Istok," calculated and substantiated an effect of long-distance communication without the aid of equipment. This effect consists essentially of excitation, in cerebral fluid, of acoustic vibrations which reach auditory nerves. These vibrations are excited by pulsed microwave radiation. Shchelkunov did not attempt to carry out his discovery in practice, but he considers it quite feasible from the technical standpoint.

In a scrapbook which I leafed through, there was a short clipping which read: "I, Ivan Sergeyevich Kachalin, and (the name of another inventor followed) made a discovery, 'A Method of Inducing Artificial Sleep at a Distance by Means of Radio Waves,' in the Soviet Union.\* General-Colonel of Aviation Vladimir Nikitovich Abramov rendered practical assistance in formalizing this discovery. Marshal of Aviation Yevgeniy Yakovlevich Savitskiy supervised this work."

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Documents state that "a paper by the authors of an invention, 'The Action of Modulated Electric and Electromagnetic Pulses on Biological Specimens,' was presented at the bioelectronics laboratory of the USSR Academy of Sciences' Institute of Radio Engineering and Electronics (IRE). In 1973, the first 'Radioson' (radiosleep) unit was developed at military unit 71592 of the city of Novosibirsk and preliminary trials were conducted ...."

This report bears the seal of an academic institute and signatures, including those of academician Yu. Kobzarev and Doctor of Sciences E. Godik. And, by the way, the block diagram of the "Radioson" unit includes the same microwave generator whose pulses, according to G. Shchelkunov, can also evoke acoustic vibrations in the

brain.

We were able to meet with a second inventor. Ivan Antonovich (he requested that his last name not be used), an associate of an institute of the USSR Academy of Sciences, said:

"Yes, we have developed the 'Radioson' unit and have conducted not just one, but several successful tests both on ourselves and on volunteer soldiers. But prolonged correspondence with the Committee on Invencions and Discoveries didn't produce any results. They deferred consideration of our claim, which was registered as early as 974, under a totally unconvincing pre-ext."

"Perhaps, because such devices already

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existed?"

"No, at that time, this was out of the question. We gave some reports at various institutes, including IRE in 1982. Savitskiy arranged a meeting for us with specialists of a military scientific research institute. They listened with interest, but everything disappeared as into a morass

The total indirect evidence makes it possible to conclude: 'psi' weapons are technically entirely feasible, prototypes of them were tested as early as the 1970s and 1980s, and this means that they may also exist now.

\*See also the *Daily SNAP*, November 25, 1991, p. 4, col. 1 (SNAP 920203)

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